

Systems Approach to Spontaneous Volunteer Management and Application to Wilderness Search & Rescue

Presentation for the Virginia Public Safety Outreach
Conference and Training

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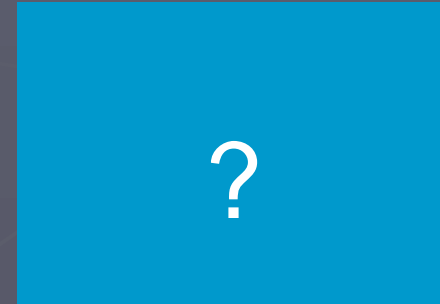
George Washington University
Appalachian Search and Rescue Conference

November 16, 2005

My background

- Member of the Blue Ridge Mountain Rescue Group and Appalachian Search & Rescue Conference since 1994
- Academic studies in Systems Engineering. Pursuing doctorate with concentration in Crisis and Emergency Management at the George Washington University

Whether you want them or not, spontaneous volunteers will come....



- 14,000 volunteers arrived for the Elizabeth Smart search¹
- 25,000 personnel assisted the Columbia Shuttle recovery; 270 organizations including businesses and volunteer groups²
- How many will be at your next high-profile mission?

1 <http://www.prweb.com/releases/2003/10/prweb86423.htm>

2 <http://www.fema.gov/news/newsrelease.fema?id=2808>

Pic 1 www.csmonitor.com/2002/0614/p01s02-ussc.html

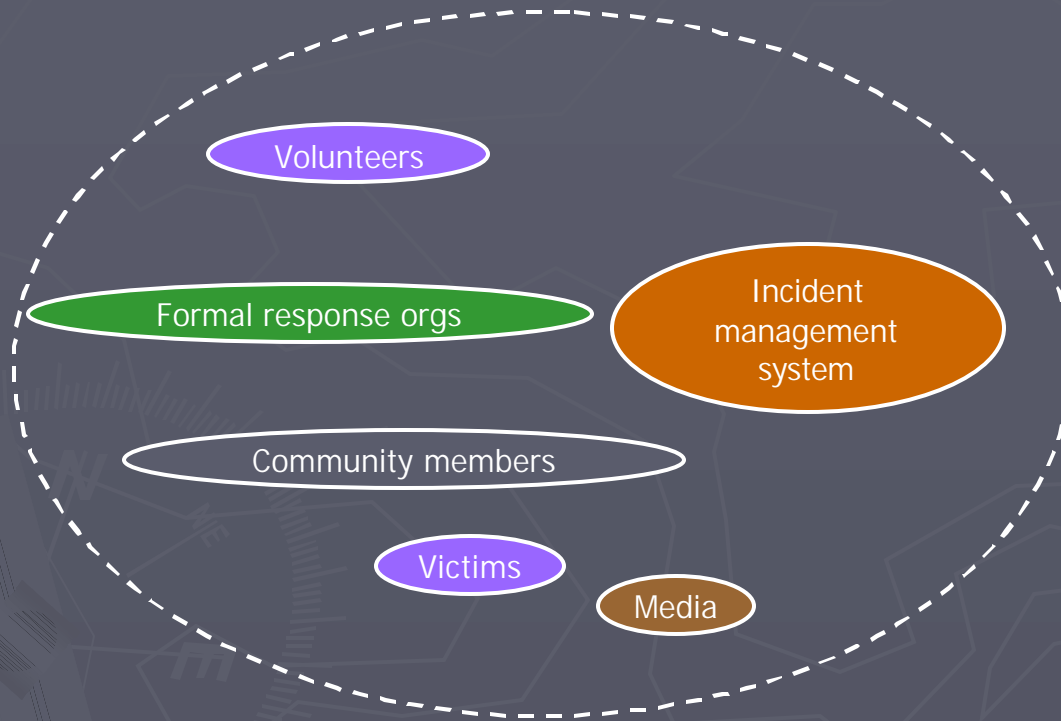
Pic 2 www.tamu.edu/ticc/columbia.htm

Topics

- Systems Approach to (Generic) Model of Volunteer Management
- Application of techniques (wilderness search and rescue mission example)

Systems Approach

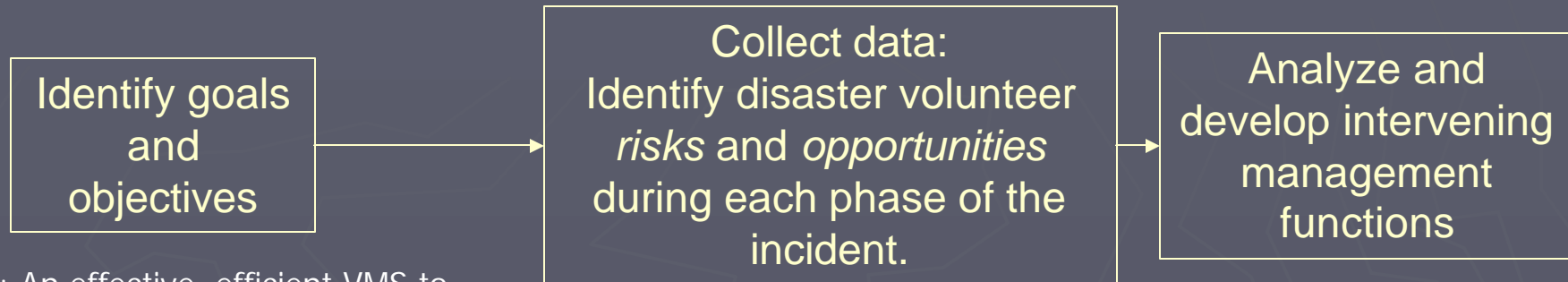
A system is a collection of inter-related components that work together to accomplish a common goal.



Volunteer efforts have a common goal of lessening the impact of the disaster on its victims and property, and returning the community to a pre-disaster state.

Systems engineering is an inter-disciplinary approach that uses a structured development process from concept through production and operation.

Systems Approach



Goal: An effective, efficient VMS to process both pre-registered and spontaneous volunteers who wish to assist during disasters.

- Fulfill incident response personnel needs
- Minimize response/ recovery cost to community
- Minimize disruption to responder community
- Provide for safety of vols/community
- Maximize volunteer experience
- Provide mechanism to improve system



- Field studies
- After-action reports
- News articles
- Interviews
- Existing system descriptions

The information collected was evaluated to identify factors that lead to opportunities and failures. Failures can be related to:

- Equipment/Material Problem
- Procedure Problem
- Personnel Error
- Design Problem
- Training Deficiency
- Management Problem
- External Phenomena⁶

Align with Volunteer Management System (VMS) Stages

Risks/opportunities found in literature are placed against VMS stages (the point in time where they are likely to occur). Then identified intervening functions to mitigate risks and leverage opportunities.

Risks/Opportunities

Examples

- Potential volunteers converge at the scene, causing congestion, disruption of efficient response operations, and stress on support resources

Lack of understanding by volunteers of need, where to report, what to bring, length of need, etc

Emergency responders view volunteers as a nuisance rather than a resource

Nearby
volunteers are a
significant source
of timely
manpower

Substantial
economic
savings when
using volunteers

VMS personnel may not have a clear understanding of all volunteer contributions and issues during the event

Incident induced
effects on
volunteer mental
and/or physical
health

Incident Recognition

Notification/ Activation

Mobilization

Operations-Initial

Operations-Ongoing

Demob

Recovery

Intervening Functions

Intervening Functions

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Intervening Functions

Develop Intervening Management Functions

- Interventions to reduce risk
 - Example: establish a volunteer reception center to assign tasks
- Interventions to leverage opportunity
 - Example: network with professional associations to solicit volunteers

Incident Risks:

- Potential volunteers converge at the scene, causing congestion, disruption of efficient response operations, and stress on support resources [2-14]
- Volunteers come without being requested [7, 15-17]
- Some converging volunteers have exploitive motives [3,19]

Opportunity:

- A period of altruism follows disaster, predisposing people to volunteer if opportunity presents [35-39]

Numbers indicate references from the literature.

Incident Recognition

VMS Interventions:

- VMS program managers recognize the need for volunteer management:
 - to manage unsolicited volunteers,
 - to manage identified incident requirements that may be met by known volunteer capabilities, or
 - to manage the message that no volunteers are needed and the process to implement the no-volunteers-needed decision
- VMS program managers request VMS activation

IAFC NEWS ALERT

FOR IMMEDIATE RELEASE

Contact: IAFC Communications Department

703/273-0911

<http://www.iafc.org/hurricane/index.asp>

Do Not Self-Dispatch to Louisiana

Fairfax, Va., September 8, 2005... New Orleans officials are reporting that 150-200 firefighters are self-dispatching daily to the city and surrounding areas. There are currently 1,000 firefighters at the staging area in Algiers. They are set up for 500 and can not logistically support additional personnel. **Please do not self-dispatch to Louisiana.**

"We know you would like to be helpful, but we are creating our own problems. We ask that if you want to be of assistance, please work through your state emergency management agency. You may also provide help in the form of donations to the International Association of Fire Fighters or the National Volunteer Fire Council, or through support the Adopt a Firehouse program," said Chief Bill Killen, president of the IAFC.

Example of message to manage the message that no volunteers are needed, and how to help in a constructive way.

Some converging volunteers have exploitative motives

Fritz and Matthewson

Curious



Source: Wachtendorf and Kendra

Helpers



Source: FEMA

Exploiters

Cashing in on the tsunami tragedy

* From Page One

"It pains to see people make a fast buck out of somebody else's misery," said a local customer who shunned the tsunami CDs.

It was learnt that the pirated CDs were allegedly supplied from a neighbouring country.

Another Bruneian said that he would not mind the pirated tsunami CDs being sold here so long as the proceeds go to the Tsunami Fund. "What's happening here is totally unfair to the victims as well as their families," he added.

Source: Borneo Bulletin

Kendra and Wachtendorf

Returnees



Source: BBC

Anxious



Source: David Rheingold

Fans (new)



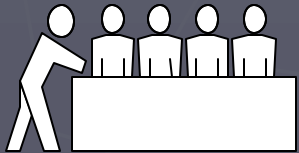
Source: Army Corps of Engineers

People converging on a disaster site may have different motives. Different types of convergers are discussed by Fritz, Matthewson, Kendra, and Wachtendorf.

Application to Wilderness Search and Rescue



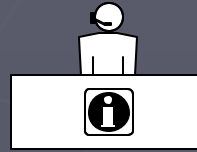
Volunteer Management Functions



Preplan



Determine
Volunteer Mgmt
Strategy and
Communicate



Establish
System
and
Register
Volunteers



Supervise
and Train
Volunteers

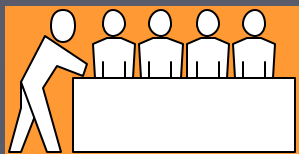


Plan for
Volunteer
Demobilization

This is an example of how volunteer issues & risks can be addressed in wilderness search and rescue. Functions are described before and throughout the stages of the incident.

Risks/Issues Addressed:

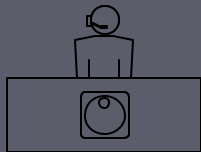
- Incident staff not prepared for large influx of volunteers



Preplan



Determine
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Communicate



Register
Volunteers



Supervise
and Train
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Plan for
Volunteer
Demobilization

Pre-plan to identify positions appropriate for volunteers

Affiliated Agencies/Orgs

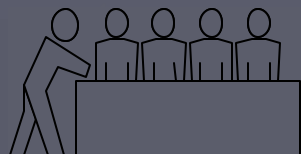
- Communications (ARES/RACES)
- Food/Shelter (Auxiliary/Religious Groups)
- Field team members (Military/Scouts)

Spontaneous Volunteers

- Staging/ transportation
- Logistics (food, toilets, etc.)
- Volunteer Registration
- Computer research (weather, news reports, etc.)
- Other command post tasks (maps, local knowledge for strategy)
- May be linked with existing org!

Risks/Issues Addressed:

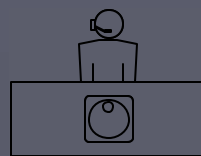
- Security concerns
- Volunteer commitment changes



Preplan



**Determine
Volunteer Mgmt
Strategy and
Communicate**



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Volunteers



Supervise
and Train
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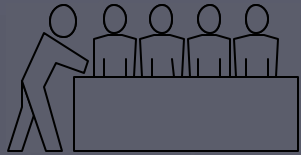
Plan for
Volunteer
Demobilization

Determine Strategy

- Is mission appropriate for volunteers (time-critical search vs. evidence investigation)?
- Responsible agent's willingness to incorporate volunteers (any restrictions- night searching/minors in field?)

Risks/Issues Addressed:

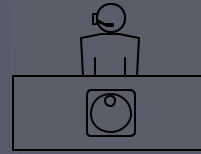
- Media appeals for assistance without coordination
- Volunteers come unequipped
- Incident lacks necessary number of volunteers to search area



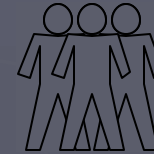
Preplan



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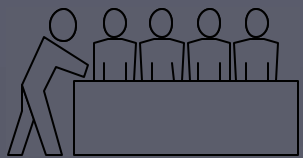
Plan for
Volunteer
Demobilization

Communicate with press releases/ interviews

- Include information on proper clothing/equipment
- Address how volunteers are being used
- Provide pre-printed information
- Provide time and place to meet. Use clear signage!
- Help relay that there are trained resources serving their community

Risks/Issues Addressed:

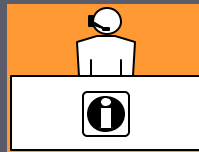
- Volunteers lack skills for field work
- Lack common view of the incident



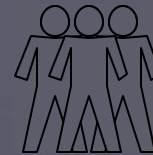
Preplan



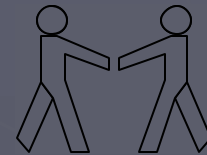
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Volunteers



Plan for
Volunteer
Demobilization

Register, orient, and task

- Post information!
- Screening/certifications
- Special skills/ request for skills from search staff
- Handle groups differently than individuals?
- Identify existing leaders

Think about the differences in volunteer groups that come to assist. Are they performing tasks that they do regularly, or something new for the incident? Are they working in an organizational structure that is familiar or new?



Recruited volunteers with specific skills for unique needs



Spontaneous Volunteers-Independent Community Members

New
Structure
Old

Expanding

Emerging



Established

Extending

Tasks
New

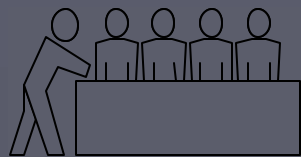


Affiliated Organizations

Adapted from the Disaster Research Center Typology
(Ref: Dynes- Organized Behavior in Disaster; 1974)

Risks/Issues Addressed:

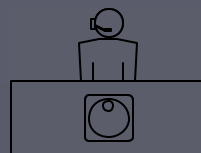
- Volunteers spend large amount of time at base/ become frustrated and leave
- Volunteers become injured in the field
- Well-meaning volunteers provide unsafe food



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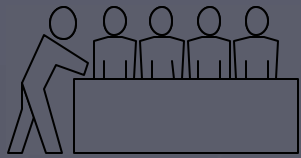
**Supervise
and Train
Volunteers**



Plan for
Volunteer
Demobilization

Supervise and Train

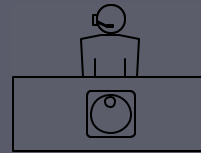
- Use professional staff as leaders (spread the wealth)
- On-scene training
- Set expectations
- Family members as special case



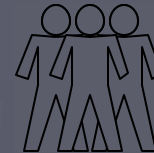
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Plan for Volunteer Demobilization

- Thank for participation
- Brief on outcome- brings closure/dispels rumors
- Plan for handling inappropriate volunteers
- Obtain feedback

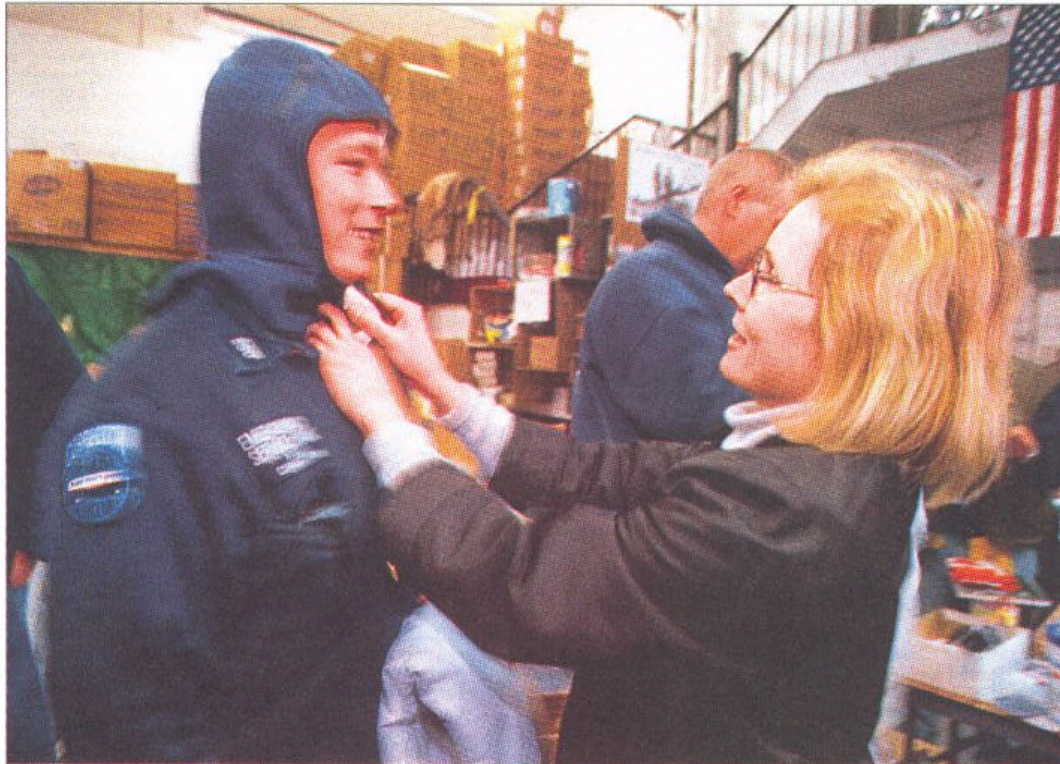
Some Take-Aways

- Recognize infrastructure needed for volunteers
- Think about volunteer management *throughout* the phases of an emergency
- They will come... coordinate!
- Many positions can be meaningful

Volunteers that are not incorporated in the formal response may turn what could have been positive coordination into poor public relations for incident management. See article at: <http://www.wtcgroundzerorelief.org/article021102.htm>

The Metro Section

The New York Times



Photographs by Kelly Gunther for The New York Times

Rhonda Roland Shearer helping a member of the Police Department's Emergency Service Unit prepare to go to ground zero.

Uphill Fight for a Downtown Volunteer

Artist Gets Thanks at Ground Zero, but Not From the City

Many positions are meaningful. Volunteers in this picture are simply holding paper towels - this is reinforcing the importance of decontamination for rescue workers.



WTC – 2001 – New York, NY
Source: Nelson Morse

Additional Reference

Arlington County Public Health Volunteer Management System

<http://www.gwu.edu/~icdrm/projects/VMS/index.htm>

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 - [COMMUNICATIONS PLAN \(VMS 205\)](#)

This presentation focused on a wilderness search and rescue application. For additional information, please see the Arlington County Public Health Volunteer Management System sponsored by the de Beaumont Foundation. This project includes a complete toolkit for managing spontaneous and pre-registered volunteers in a public health event.

Questions?

